髓鞘染色试剂盒(牢固蓝-焦油紫法)

货号： G3245
规格： 3×50mL
保存： 室温，避光保存，有效期 1 年。
产品组成：

名称	3×50mL	保存
试剂(A):牢固蓝染色液	50mL	室温，避光
试剂(B):牢固蓝分化液	50mL	室温
试剂(C):焦油紫染色液	50mL	室温，避光

产品介绍：

髓鞘（myelin sheath）是神经细胞的质膜沿着轴索的轴心螺旋缠绕形成的多层脂双层结构，在病理诊断中有一定意义，髓鞘的病理变化分为早期、中期和晚期。在早期着色较深；病变中期阶段的髓鞘变性形成脂滴，可用脂质染色加以显示，后期彻底溃变并被吞噬细胞清除，不再有阳性结果。

很多疾病都可以引起髓鞘的变化，髓鞘染色试剂盒(牢固蓝-焦油紫法)可以显示病理情况下髓鞘是否完整、变性、坏死程度及修复情况，对神经组织的病理诊断和研究均有意义，例如神经纤维受损时，髓鞘可出现膨胀、曲折成球形、断裂或脱鞘完全消失等改变。

操作步骤：（*仅供参考*）

1. 石蜡切片 5～8μm，脱蜡至 95%乙醇。
2. 入牢固蓝染色液，室温过夜（冰冻切片染色时间不超过 16h）。
3. 入 95%乙醇洗去多余染色液，蒸馏水冲洗。
4. 入牢固蓝分化液分色 15s，入 70%乙醇分色 30s。
5. 水洗，显微镜观察（如果必要，重复分化步骤 4），直到灰质和白质轮廓分明。
6. 入焦油紫染色液复染 30～40s，水洗。
7. 用 95%、100%乙醇脱水，二甲苯透明，中性树胶封固。

染色结果：

髓鞘	蓝色
神经元	粉红色—紫色

注意事项：

1. 分化这一步很关键，应严格控制分化时间，可在镜下观察分化程度。
2. 固定液以 10%的福尔马林为佳。
3. 切片不宜太厚，应控制在 8～9μm 以内，否则易出现脱片或过染等现象。
4. 如室温染色效果不佳，可在 56℃下染色 2h。
5. 复染液染色水洗后不能用 70%乙醇脱水，否则会脱去牢固蓝的颜色。
6. 为了您的安全和健康，请穿实验服并戴一次性手套操作。

Luxol Fast Blue Myelin Stain Kit(Cresyl Violet Method)

Cat: G3245
Size: 3×50mL
Storage: RT, avoid light, valid for 1year.

Kit Components

Reagent	3×50mL	Storage
Reagent(A): LFB Staining Solution	50mL	RT, avoid light
Reagent(B): LFB Differentiation Solution	50mL	RT
Reagent(C): Cresyl Violet Staining Solution	50mL	RT, avoid light

Introduction

Myelin sheath is a multilayer lipid double-layer structure formed by the plasma membrane of nerve cells spirally winding along the axis of axon. Myelin staining has certain significance in pathological diagnosis. The pathological changes of myelin sheath can be divided into early, middle and late stages. In the early stage of the lesion, the color is deep. In the middle stage, the myelin degenerated into lipid droplets. In the late stage, the myelin sheath degenerated completely and is cleared by phagocytes, so there is no positive result.

Many diseases can cause the change of myelin sheath. Luxol Fast Blue Myelin Stain Kit can show whether the myelin sheath is complete, denatured, necrotic and repaired under pathological conditions. It has significance for the pathological diagnosis and research of nerve tissue.

Protocols(*for reference only*)

1. Cut into paraffin section in 5-8μm thick, then dewax to 95% ethanol.
2. Soak in LFB Staining Solution and stay overnight at room temperature (the staining time of frozen section shall not exceed 16h).Wash the excess dye solution with 95% ethanol. Rinse in distilled water.
3. Differentiate by LFB Differentiation Solution for 15s. Differentiate in 70% ethanol for 30s.
4. Rinse in distilled water and observe under the microscope(if necessary, can repeat step 3)until the gray and white matter is clear.
5. Re-dyeing with Cresyl Violet Staining Solution for 30-40s, wash with water.
6. Dehydrate in 95% and 100% ethanol, transparent by xylene and seal with resinene.

Result

Myelin Sheath	Blue
Neuron	Pink Red to Purple

Note

1. Differentiation is a key step. The differentiation time should be strictly controlled, and the degree of differentiation can be observed under the microscope.
2. It is better to use 10% formalin as fixative.
3. The section should be controlled within 8-9 μm, otherwise, it is easy to take off the section or over dye.
4. If the dyeing effect at room temperature is not good, can stain at 56 ℃ for 2h.
5. After washing away the re-dyeing solution, it is not advised to dehydrate in 70% ethanol, otherwise the blue color of Luxol fast blue will be removed.
6. For your safety and health, please wear experimental clothes and disposable gloves.